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EXECUTIVE SUMMARY OF INDUSTRY AND DEVELOPMENT: GLOBAL REPORT 1993/1994

Prepared by the Secretariat

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Introduction

1. UNIDO, in its annual Global Report, presents its perspective on global industrialization. The purposes of this publication are twofold: to provide an annual review of the latest trends in the global industrial landscape and of the near-term prospects for industrialization in developing countries, and to present an in-depth assessment of selected issues of crucial importance to the industrialization of developing countries. The annual review consists of analyses at the global (chap. I), regional and subregional (chap. II) and industry (chap. IV) levels. The analyses of chapter III focus on the role of international trade in industrialization, and the extent to which the experience of the Asia-Pacific model of export-led industrialization is relevant to industrialization strategy in sub-Saharan Africa.

I. THE GLOBAL ECONOMY: SHORT- AND MEDIUM-TERM OUTLOOK

A. UNIDO projections for 1993 and 1994

2. From near zero growth in 1991, world output failed to rebound strongly in 1992, with a growth rate in world gross domestic product (GDP) of only 1.3 per cent. World manufacturing suffered negative growth in 1991 and 1992, and will rise to only 0.4 per cent in 1993. While growth momentum should return by 1994, the continuing sluggishness of many cyclical indicators in the major economies makes it difficult to project the exact timing of global economic recovery. The 3.1 per cent growth projected in 1994 for world GDP is therefore the most tentative one UNIDO has offered in the last 10 years of its projection exercises; so too is the projection for the growth of world manufacturing value added (MVA) in 1994 of 3.6 per cent, up from 0.4 per cent in 1993. Forecasts of GDP and MVA for 1993 and 1994, for some 140 countries organized into 10 regions or subregions are summarized in table 1. Table 2 displays the share of developing countries in world MVA, by major industry for the years 1975, 1990 and as projected for 1994. This table also displays sectoral MVA growth rates for the developing and the developed market economy countries for the periods 1975-1985 and 1985-1993. While MVA in the developing countries has grown about twice as fast as in the developed countries over both periods, their progress in catching up to the developed market economies has been limited. During the 15 years from 1975 to 1990, the developing countries' share of world output increased by only 2.8 percentage points. In fact the projected gain in share between 1990 and 1994 exceeds the gain over the previous fifteen years as indicated in figure 2. There are two reasons for this surge. First, the slowdown in the world economy has hit the developed economies harder than the developing economies. But the main factor underlying the projected increase in the

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Table 1. Regional and country estimates of GDP and MVA growth for 1992 and projections for 1993 and 1994
(Percentage)

Region, country or area	GDP growth rates			MVA growth rates		
	1992	1993	1994	1992	1993	1994
World	1.3	1.2	3.1	-0.9	0.4	3.6
Developing countries (excluding China)	3.5	4.0	4.4	3.0	5.0	6.0
Developed market economies	1.4	1.0	2.5	-0.8	-0.5	2.2
China	12.8	10.0	8.2	21.7	15.0	10.0
Eastern Europe and former USSR (excluding former Yugoslavia)	-12.1	-10.7	1.1	-18.9	-13.6	1.7
North America	2.0	2.4	3.0	2.9	2.7	3.8
Bermuda	1.9	2.0	2.5	2.3	2.4	2.5
Canada	0.9	3.0	3.3	0.5	5.2	3.0
United States	2.1	2.3	3.0	3.1	2.5	3.8
Western Europe	1.2	-0.3	1.9	-1.0	-2.8	1.1
Austria	1.5	-0.9	1.1	-	-2.8	1.1
Belgium	1.3	-	1.2	-2.4	-1.0	0.9
Denmark	1.1	1.1	2.1	1.9	-2.4	1.3
Finland	-3.6	-	2.0	1.5	4.4	2.6
France	2.0	-0.8	1.9	-1.4	-3.6	0.6
Germany, eastern part	6.0	3.0	4.2	8.4	4.6	6.1
Germany, western part	1.5	-1.7	1.3	-2.1	-6.3	-0.6
Greece	1.4	1.5	2.0	-0.9	-0.1	0.7
Iceland	-4.3	-0.7	1.2	-8.5	0.1	-0.1
Ireland	2.1	1.2	1.8	9.8	2.8	4.7
Israel	6.4	3.8	6.0	8.5	4.1	6.2
Italy	1.0	-0.8	1.8	-1.8	-3.8	1.3
Luxembourg	1.7	3.5	3.3	-0.8	3.4	3.1
Malta	5.3	3.4	4.7	4.9	2.8	4.3
Netherlands	1.8	-0.7	1.5	0.2	-0.3	1.5
Norway	3.3	0.5	2.1	1.5	-1.3	0.0
Portugal	2.7	0.8	2.2	-4.0	0.1	1.9
Spain	2.0	-0.4	2.0	-2.0	-3.7	0.4
Sweden	-0.9	-1.6	1.4	-3.9	-6.3	0.2
Switzerland	-0.7	-0.5	1.0	-0.7	-1.3	1.1
United Kingdom	-0.6	2.0	3.1	-0.6	1.4	2.8
Eastern Europe and former USSR (including former Yugoslavia)	-12.3	-10.7	1.0	-19.1	-13.9	1.4
Albania	-16.0	-5.0	3.1	-20.0	-12.0	-3.2
Bulgaria	-15.0	-9.0	2.5	..	..	..
Former Czechoslovakia	-9.0	-3.0	1.0	-12.4	-4.5	-0.7
Hungary	-3.0	-	2.0	-8.5	-1.6	1.9
Poland	0.5	1.5	3.3	3.4	1.5	4.0
Romania	-15.0	-9.0	-	-22.0	-14.0	-10.0
Former USSR	-12.8	-12.0	1.0	-20.0	-15.0	2.0
Former Yugoslavia	-17.0	-11.0	-2.0	-24.3	-21.3	-10.2
Japan	0.8	1.1	2.5	-6.2	-0.8	1.8

(cont'd)

Table 1. (cont'd)

Region, country or area	GDP growth rates			MVA growth rates		
	1992	1993	1994	1992	1993	1994
Other developed countries	1.4	2.3	2.7	-1.3	0.9	1.7
Australia	2.2	3.0	3.4	-1.3	1.2	2.1
New Zealand	2.5	3.2	3.2	5.9	3.9	3.9
South Africa	-0.9	0.5	1.0	-3.4	-0.6	0.2
Latin America and the Caribbean	2.3	3.1	3.5	1.1	3.0	3.8
Argentina	8.7	6.0	6.5	13.9	9.1	10.1
Bahamas	-1.1	2.3	3.9	..	..	..
Barbados	-3.0	0.8	4.4	-7.1	0.4	2.8
Belize	-0.3	3.7	4.3	1.4	1.3	2.8
Bolivia	3.8	4.1	4.2	4.5	4.9	5.0
Brazil	-0.9	3.0	3.0	-3.4	2.0	2.0
Chile	10.4	5.0	4.3	17.6	7.0	6.0
Colombia	2.7	3.4	3.8	1.5	2.6	3.3
Costa Rica	7.3	4.5	4.7	8.6	5.1	5.4
Cuba	-10.0	-3.0	-	-11.0	-7.0	-2.0
Dominican Republic	7.7	5.3	3.0	9.5	5.8	2.1
Ecuador	3.7	3.2	3.9	2.8	3.2	3.4
El Salvador	4.6	4.2	4.4	5.3	4.9	5.2
French Guiana	1.4	-	0.6	2.3	1.9	2.1
Guadeloupe	1.8	4.1	2.7	1.4	1.5	2.0
Guatemala	4.6	3.5	4.0	4.6	3.4	4.0
Guyana	7.8	5.0	5.0	11.8	10.8	8.2
Haiti*	-10.0	-8.5	-5.3	-19.3	-16.5	-10.7
Honduras	4.3	3.9	3.9	4.4	4.3	4.8
Jamaica	2.0	1.7	2.0	1.7	1.5	1.8
Martinique	6.1	6.5	5.0	1.9	1.8	2.1
Mexico	2.8	2.5	4.0	1.8	2.9	5.1
Montserrat	0.3	2.9	4.0	6.3	4.4	5.7
Netherlands Antilles and Aruba	-1.0	1.3	-0.7	2.7	2.4	2.7
Nicaragua	-0.6	1.9	3.0	0.0	3.0	5.0
Panama	7.6	3.0	2.8	7.2	2.4	2.1
Paraguay	1.7	1.9	2.0	0.8	0.9	1.1
Peru	-2.8	2.5	1.5	-6.2	2.6	1.4
Puerto Rico	1.0	2.5	4.0	1.7	3.3	4.9
Suriname	1.4	2.4	1.4	1.0	1.5	0.5
Trinidad and Tobago	0.0	1.0	1.3	-1.3	1.7	0.6
Uruguay	7.4	3.0	3.8	8.3	2.6	3.6
Venezuela	7.3	4.0	2.0	8.3	5.1	3.2
Tropical Africa (sub-Sahara)	0.5	2.0	2.4	-0.1	2.7	3.3
Benin*	2.8	1.1	1.6	5.0	4.2	3.3
Botswana*	4.0	7.0	8.1	..	..	..
Burkina Faso*	4.0	2.4	2.4	3.0	2.6	2.1
Burundi*	2.4	1.0	3.6	1.0	4.2	3.5
Cameroon	-4.0	-3.6	-2.9	-4.8	-4.1	-3.0
Cape Verde*	5.0	3.8	4.3	6.5	6.6	6.5
Central African Republic*	0.2	-0.1	0.7	1.9	1.8	2.0
Chad*	3.0	0.7	-0.3	2.6	0.2	-1.1
Congo	3.2	5.0	5.2	8.7	4.2	6.3
Côte d'Ivoire	0.7	1.0	2.5	2.0	1.7	3.6
Djibouti*	2.9	2.7	2.4	4.0	3.8	3.7
Equatorial Guinea*	-4.3	-4.5	-2.4	-4.9	-6.3	-3.9

(cont'd)

Table 1. (cont'd)

Region, country or area	GDP growth rates			MVA growth rates		
	1992	1993	1994	1992	1993	1994
Ethiopia and Eritrea*	1.0	-	1.5	-3.7	0.2	0.6
Gabon	1.5	2.5	3.0	..	..	..
Gambia*	8.4	5.7	4.0	4.9	3.4	2.4
Ghana	3.9	4.6	6.1	5.8	7.5	11.0
Guinea*	2.1	0.6	1.9	2.5	2.1	2.4
Guinea-Bissau*	2.2	2.4	2.9	-0.1	-0.3	-
Kenya	1.0	2.1	3.8	2.5	3.0	6.0
Lesotho*	3.4	6.9	5.0	..	..	..
Liberia*	-1.2	-3.7	-2.5	0.3	-4.6	-2.8
Madagascar*	-2.0	-0.9	-1.4	-5.3	-3.4	-3.1
Malawi*	-7.9	0.9	0.1	-1.2	4.0	4.1
Mali*	0.3	3.2	2.3	3.3	4.2	4.6
Mauritania*	1.4	1.1	2.8	6.3	6.4	6.3
Mauritius	5.8	6.9	6.4	8.8	9.9	9.4
Mozambique*	-	0.5	-2.3	-0.2	-0.9	-3.4
Namibia	1.0	1.9	2.0	..	..	..
Niger*	1.6	1.4	2.2	1.3	1.3	1.5
Nigeria	4.3	4.0	3.5	5.7	7.5	4.5
Reunion	4.7	4.2	5.0	4.1	4.3	3.7
Rwanda*	-19.0	-2.0	-5.0	..	..	..
Sao Tome and Principe*	0.8	-2.5	-2.5	1.3	-1.3	-1.3
Senegal	3.3	2.1	3.1	3.1	4.0	3.6
Seychelles	1.9	2.9	3.6	7.9	8.4	8.8
Sierra Leone*	3.5	1.1	-0.6	0.8	0.1	-1.6
Somalia*	-7.0	-	-4.3	..	..	..
Swaziland	4.1	3.4	4.3	6.0	4.5	6.0
Togo*	-1.5	1.3	2.2	-0.9	1.7	2.5
Uganda*	3.5	3.2	3.8	5.7	4.6	6.2
United Republic of Tanzania*	2.2	2.6	2.9	2.9	2.6	3.5
Zaire*	-6.1	-3.0	-2.1	-8.4	-4.7	-3.7
Zambia*	-2.2	0.1	-0.6	-2.6	0.3	0.5
Zimbabwe	-11.0	3.5	4.5	-10.1	4.3	5.0
North Africa	1.3	1.4	2.9	4.1	3.5	4.4
Algeria	-1.8	-0.4	1.1	-2.2	-3.4	1.5
Egypt	2.8	3.3	3.9	6.0	7.0	3.1
Libyan Arab Jamahiriya	0.9	0.1	3.5	9.7	9.9	10.2
Morocco	3.3	3.1	3.5	4.4	3.9	4.1
Sudan*	2.0	2.5	1.9	1.0	1.4	1.0
Tunisia	8.0	4.0	5.8	12.0	6.9	9.1
Western Asia	6.4	5.2	4.4	7.6	6.7	6.4
Bahrain	1.3	2.3	3.1	1.6	2.1	2.6
Cyprus	1.4	2.0	3.1	2.0	3.4	4.4
Iran (Islamic Republic of)	9.0	3.5	2.9	8.6	4.6	4.2
Iraq	-2.0	2.0	2.8	-1.1	8.0	5.3
Jordan	11.0	8.7	9.3	7.8	7.0	6.8
Kuwait	20.0	..	8.0	20.7	..	7.5
Oman	7.0	7.8	6.1	..	..	..
Qatar	4.0	5.0	4.5	9.7	9.8	9.7
Saudi Arabia	5.0	5.0	4.5	7.7	7.7	7.7
Syrian Arab Republic	7.0	5.0	5.7	..	..	..
Turkey	5.3	4.8	5.0	6.6	6.0	6.2
United Arab Emirates	3.5	4.0	4.5	10.4	8.4	7.6
Yemen*	3.5	6.5	8.1	8.5	8.6	8.5

(cont'd)

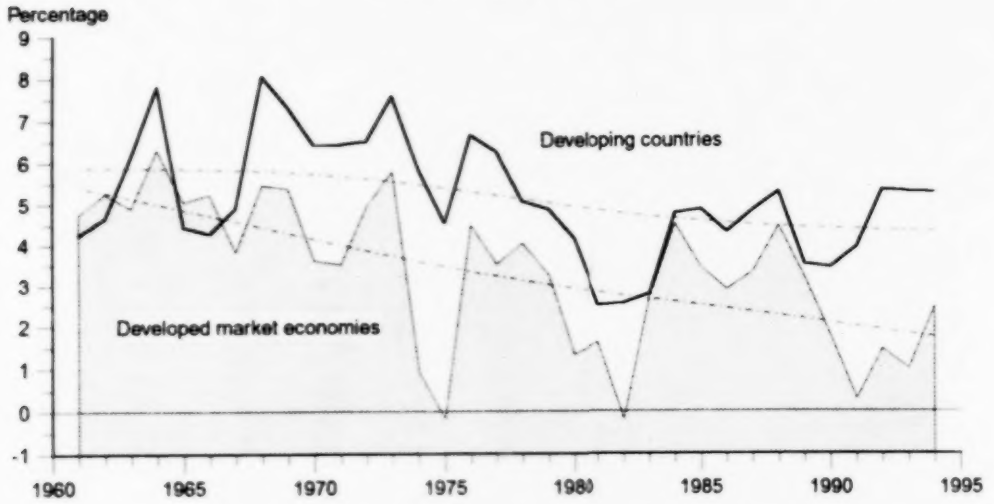
Table 1. (cont'd)

Region, country or area	GDP growth rates			MVA growth rates		
	1992	1993	1994	1992	1993	1994
Indian Subcontinent	4.4	4.7	4.6	3.3	7.9	6.9
Afghanistan*	3.0	3.0	4.0	4.0	3.4	3.7
Bangladesh*	3.9	4.6	4.0	10.1	..	..
Bhutan*	5.0	7.8	6.0	6.0	8.0	12.9
India	4.2	4.5	4.5	2.2	8.0	7.0
Myanmar*	1.2	1.5	0.8	1.1	6.0	1.3
Nepal*	3.1	3.7	5.2	1.5	3.0	1.4
Pakistan	6.4	6.3	6.0	7.7	8.0	6.9
Sri Lanka	4.3	4.4	4.1	7.5	8.0	7.2
East and South-East Asia, Oceania	5.5	6.2	6.8	6.0	7.4	8.8
Brunei Darussalam	2.0	0.4	3.3	2.4	0.6	3.9
Fiji	4.2	1.0	0.5	7.4	4.3	-2.2
French Polynesia	4.0	5.7	5.4	5.2	4.7	7.1
Hong Kong	6.0	5.5	5.1	4.6	4.3	4.4
Indonesia	5.7	6.1	6.5	8.9	7.0	8.4
Macao	..	..	..	..	..	..
Malaysia	8.1	7.8	8.0	9.2	10.8	11.5
New Caledonia	9.0	7.7	8.6	6.7	5.8	6.9
Papua New Guinea	9.0	9.0	8.0	15.1	14.6	13.9
Philippines	0.0	4.1	5.1	3.0	5.1	5.8
Republic of Korea	4.8	6.0	7.5	5.1	8.0	11.5
Samoa*	-5.0	3.0	1.1	-0.6	0.2	-0.6
Singapore	5.8	5.8	6.5	6.0	5.9	7.1
Taiwan Province	6.1	6.7	6.4	3.1	5.9	5.1
Thailand	7.4	7.6	8.1	9.0	9.2	9.8
Tonga	1.9	1.2	2.8	6.3	2.9	7.9
Tuvalu*	..	..	..	..	..	..
Vanuatu*	-	3.8	4.5	13.7	13.4	13.3
Centrally planned Asia	12.1	9.4	7.9			
China	12.8	10.0	8.2	21.7	15.0	10.0
Democratic People's Republic of Korea	-5.0	-6.2	-5.0	..	..	..
Lao People's Democratic Republic*	7.3	5.9	5.8	8.0	8.1	8.5
Mongolia	-7.6	-10.0	-	-14.2	-5.0	-
Viet Nam	8.1	7.5	8.0	..	..	..

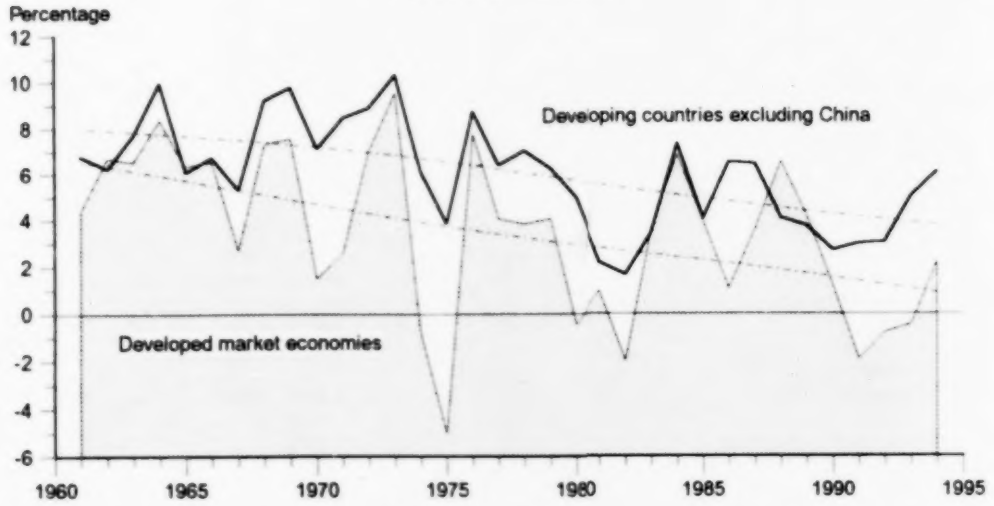
Note: Calculations are based on 1980 United States dollars.
* Least developed country.

Figure 1. Growth rates of GDP and MVA in developed and developing regions, 1961-1994

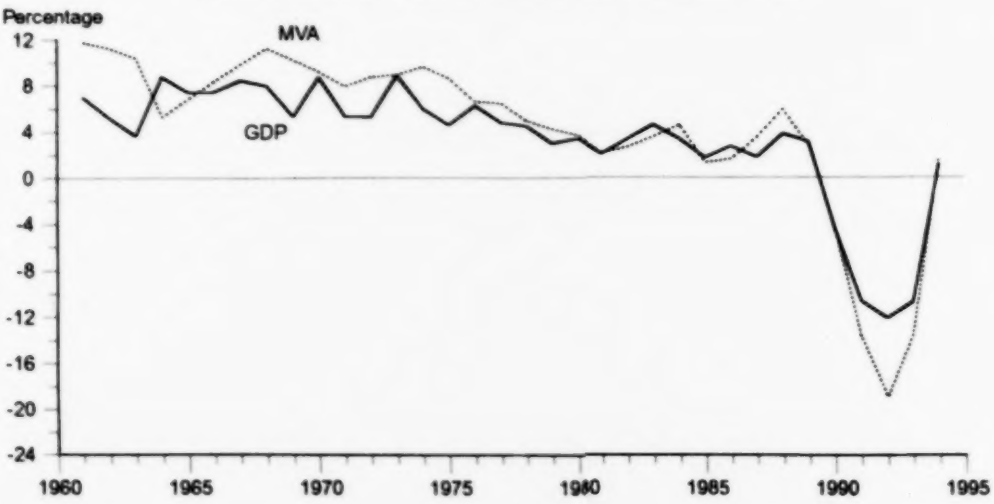
Gross domestic product



Manufacturing value added



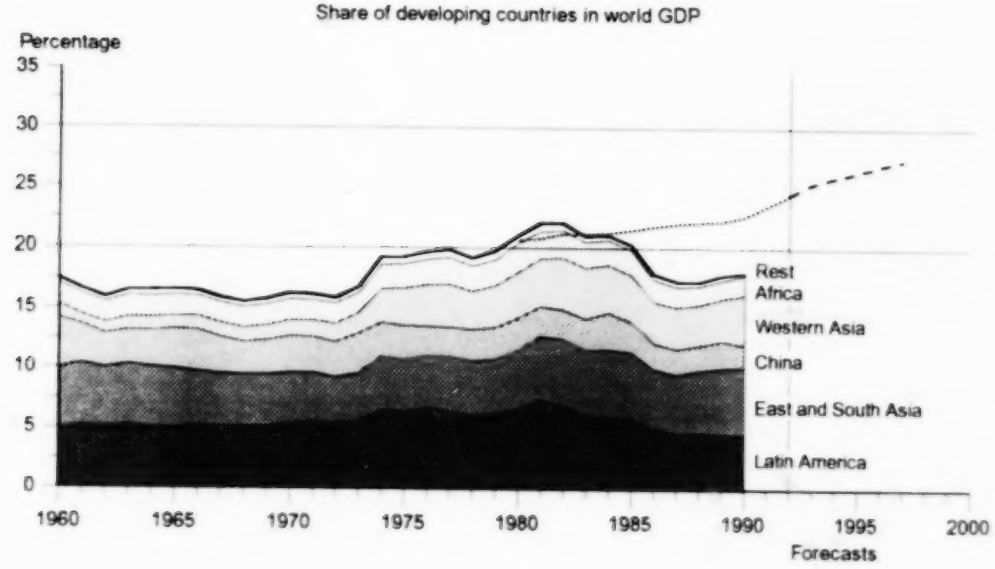
Growth rates of GDP and MVA in Eastern Europe and former USSR

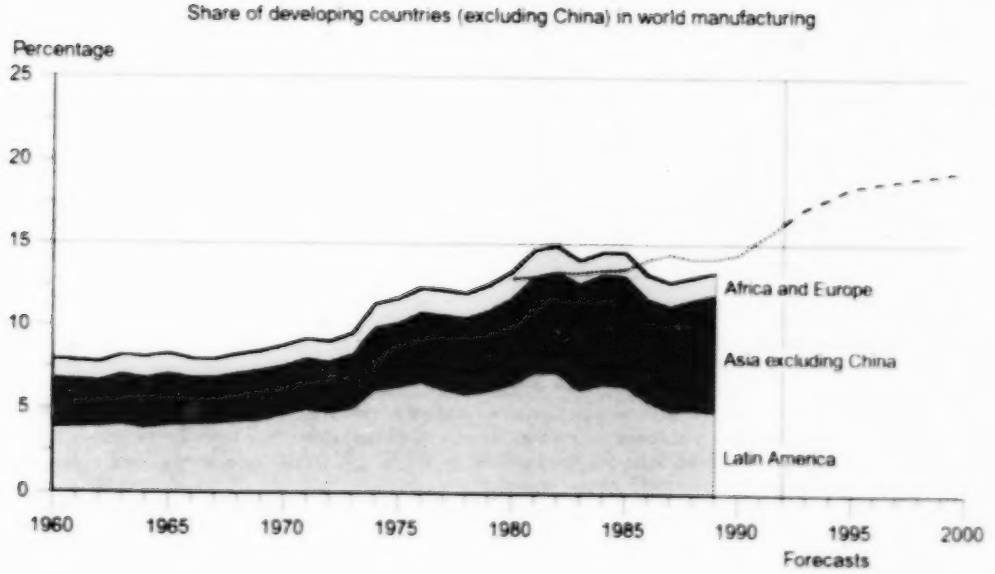


Note: Growth rates are computed using GDP and MVA data expressed in national currencies at 1980 prices and aggregated in terms of 1980 United States dollar exchange rates. The dashed lines show the long-term historical trend.

Source: United Nations National Accounts Statistics and UNIDO/PPD/PP/GLOBAL

Figure 2. Share of developing countries in world GDP and world manufacturing, 1960-2000





Note: Regional GDP and MVA shares are computed using national currency figures, which are aggregated in terms of United States dollars at current prices and exchange rates. The single dashed lines show the historical and projected world share of all developing countries for GDP and of all developing countries except China for MVA. They are computed using national currency figures expressed in 1980 prices and aggregated in terms of 1980 United States dollar exchange rates.

Source: United Nations National Accounts Statistics and UNIDO/PPD/IPP/GLOBAL

Table 2. Share of manufacturing value added of developing countries in world total in 1975, projected shares for 1990 and 1994 and growth rates 1975-1993
(Percentage)

ISIC	Industry	Share of developing countries in world total (excluding China)			Average annual growth rates			
					Developed market economies		Developing market economies	
		1975[a/]	Projected 1990	Projected 1994	1975-1985	1985-1993	1975-1985	1985-1993
3	Manufacturing	11.7	14.5	17.8	2.0	1.4	4.8	2.8
311	Food manufacturing	14.8	16.5	19.0	1.7	1.8	3.3	0.7
313	Beverages	19.8	23.9	27.6	0.8	1.6	2.8	2.8
314	Tobacco manufactures	32.9	35.0	37.2	1.5	3.5	3.6	3.4
321	Textiles	18.9	27.8	33.8	-0.4	-0.5	2.9	1.1
322	Wearing apparel	11.9	21.7	27.0	-0.4	-0.3	4.7	3.1
323	Leather and fur products	18.2	36.9	47.7	-1.2	-1.8	4.5	4.2
324	Footwear, excluding rubber or plastic	18.8	28.4	32.8	-0.5	-3.6	4.5	-1.5
331	Wood and cork products	12.6	12.5	15.1	-0.1	0.5	1.4	0.8
332	Furniture and fixtures	10.2	10.1	12.0	0.8	2.0	2.9	2.6
341	Paper and paper products	10.2	11.5	13.4	1.6	2.3	4.8	2.8
342	Printing and publishing	8.8	6.9	8.2	3.7	2.4	2.3	4.2
351	Industrial chemicals	9.6	12.6	16.2	1.4	2.7	6.9	2.5
352	Other chemical products	15.9	15.1	16.9	3.7	3.5	5.9	1.7
353	Petroleum refineries	24.7	38.5	45.1	0.9	0.6	6.8	3.3
354	Miscellaneous petroleum and coal products	5.8	15.3	21.2	1.0	2.2	11.8	0.9
355	Rubber products	13.4	21.2	26.8	1.0	0.3	5.7	3.7
356	Plastic products n.e.c.	13.7	13.4	15.1	5.6	3.9	7.3	3.7
361	Pottery, china and earthenware	14.1	20.5	27.5	-0.6	-0.1	5.9	1.6
362	Glass and glass products	11.5	14.2	17.9	1.5	1.2	3.5	3.9
369	Other non-metallic mineral products	14.2	20.4	27.4	0.5	0.9	3.4	4.4
371	Iron and steel	10.1	19.5	26.2	-1.8	-0.8	5.9	2.9
372	Non-ferrous metals	10.0	16.8	22.3	1.0	1.2	6.8	4.6
381	Metal products excluding machinery	9.8	10.8	13.8	1.2	1.4	3.8	3.2
382	Non-electrical machinery	5.1	5.8	7.6	2.7	0.8	4.9	2.2
383	Electrical machinery	8.2	12.4	15.5	4.8	0.6	7.3	5.9
384	Transport equipment	7.7	9.6	12.2	2.9	0.9	5.3	3.8
385	Professional and scientific goods	2.7	4.9	6.3	2.9	3.9	8.8	6.3
390	Other manufactures	9.8	17.4	22.9	1.0	1.3	6.2	4.5

Sources: UNIDO.

Notes: MVA growth rates are based on deflated national currencies converted to 1990 United States dollars. Growth rates are derived from 113 samples countries - 25 developed and 88 developing (industrial statistics consolidated by UNIDO).

ISIC = International Standard Industrial Classification of all Economic Activities (Revision 2).

[a/] This share calculation is based on 1975 prices and exchange rates, other years are in 1980 dollars. China and other Asian centrally planned economies are not included in the sample (their share in the world total is estimated to have amounted to 2.2 per cent in 1990 for total manufacturing).

share of the developing countries in world MVA is the plunge in MVA in the countries of Eastern Europe and the former Soviet Union (see figure 1).

3. The difficulty associated with the 1993 projection exercise stems from the output behaviour in the more advanced economies where the historical pattern seems to have changed. By past standards, the economy of the United States should have had a much stronger recovery in 1992 than the actual rate of 2.1 per cent, and it is likely that 1993 will be another lacklustre year. The year 1993 marks year one of the vaunted single market of the European Community (EC). The hopes and threats of an economically unified Europe, often translated and transcribed in the economic calculations for the growth of the world as a whole, seem to have disappeared amid the continent's worst recession for two decades. Indeed the current economic slump in Europe is shaking the very foundations of European integration. A new set of projections based on some intermediate politico-economic arrangement might produce a completely different picture. Even the UNIDO projection involving Japanese output performance is no exception. Japan is undergoing a rapid economic deceleration in spite of the pump-priming efforts of the Government - the tested and proven remedy in the past, but here too major uncertainty makes the timing of recovery more tentative than is conventionally the case.

4. The uncertainty surrounding the growth performance of these major economies has a direct bearing on the growth prospects of developing countries. UNIDO is, however, convinced that the GDP growth rate for developing countries as a whole (excluding China) will improve by nearly a half percentage point to 4.4 per cent in 1994 as shown in figure 1. MVA growth should reach 6 per cent in that year, from 5 per cent in 1993.

5. Thus paradoxically, the economic prospects for developing countries seem much brighter in the 1990s than during the 1980s. The World Bank is forecasting a surge in the growth rates of developing countries over the next 10 years. It projected annual growth rates of 4.7 per cent for the coming decade for developing countries as a whole, compared with the rate of 2.7 per cent achieved between 1982 and 1992. On the assumption that GDP per capita will grow at a slower pace, but still at 2.9 per cent per year, the Bank is confidently predicting the elimination of mass poverty in developing countries by year 2002. UNIDO projections, which are essentially of a short- to medium-term nature, bear out this general optimism. The five-year UNIDO projection puts the growth rate for developing countries, excluding China, at 4.4 per cent per year. China, which is always treated separately in the UNIDO projection exercises, is however expected to average 8 per cent GDP growth over the next five years.

6. As pointed out in previous issues of the UNIDO Global Report, developing countries have learned to insulate their economies more effectively from adverse external forces, and to rely more on their internal resources and domestic or intraregional markets. This means that the economic relationship between developed and developing countries is no longer strictly quantitative. What concerns developing countries most nowadays is the macroeconomic environment under which the global economy functions. It is the qualitative changes in the global financial and trading regimes which affect developing countries the most, and to a large extent, these changes are brought about by policies of major developed countries. In this context, UNIDO paid particular attention in preparing its medium-term projections to the probable impact of the new United States economic initiative, especially relating to its fiscal and trade policies.

B. Economic leadership of the United States

7. One of the changes which will affect the world economy in the 1990s is the would-be strong United States economic leadership. For the first time in decades, the United States is focusing its international policy not on global security, but on global economic growth. The immediate concern of the United States is, for sure, its domestic economy, specifically the problem of job creation. However, the effort to revitalize the United States economy would not only eliminate some of the basic global economic imbalances, but will bring with it new United States policy initiatives on international economic dealings and trade arrangements. A new global economic order based on realpolitik of national economic self-interest might sound ominous. Yet, after a decade of directionless expansion based on an equally disoriented international competition, the world might welcome strong leadership - this time around, in international economics as was the case in geopolitics. Already the direction of United States policy is quite plain to see. It actually intends to reduce its fiscal deficit, which has become a burden to the world as well as to the United States. Narrow though his victories were in the House of Representatives and the Senate, the President succeeded in getting legislative approval for a deficit reduction package - tax increases and expenditure reductions - of $496 billion over the next five years. The deficit reduction will lower interest rates, domestically and internationally, and encourage investment, which is essential for growth.

8. In the past three years, when the major developed countries were taking turns going through one of the worst economic recessions, developing countries remained largely unscathed, maintaining an average 3.2 per cent overall growth rate. Such a feat is all the more impressive when it is considered that the EC countries, working together, were scarcely able to achieve such a high joint growth rate even during the most prosperous years of the 1980s. Investors were quick enough to notice and exploit such a disparity in performance. The past three years have witnessed an unprecedented increase in private investment flows to developing countries. This sudden transformation of investor confidence reflects the often painful economic reforms undertaken by developing countries in recent years, under which trade and financial rules have been liberalized, public finances brought under control, unprofitable State enterprises sold off, and State control in industry and commerce reduced. But, the "push" effect of the low interest rates in the United States has helped a great deal as well. The success of the new United States administration in lowering long-term interest rates provides a genuine opportunity for growth in the United States and for the rest of the world.

9. The most significant change for developing countries in recent years has been, however, their willingness to experiment with an open economy. Developing countries, with their fragile industrial bases and fear of foreign economic influences, have always felt infinitely more comfortable with an insulated and closed economy. Decisions to eliminate tariff barriers to expose domestic industries to international competition and to allow free capital movements across borders to encourage foreign direct investment signal the end of self-imposed isolation by these countries.

C. Prolongation of the economic downturn

10. Although growth has picked up in the United States, the outlook for Japan and Europe has deteriorated, making economic recovery in the United States much weaker. A generalized economic recovery in the more advanced developed countries, and thus for the world as a whole, therefore remains even more elusive, and fears of the global economy sliding backwards into an even longer recession is prompting many international organizations to revise downward their original growth forecasts. The prolongation of the global economic downturn after 1991 is evidently due to the staggered nature of the current recession - each major developed country undergoing recession within a staggered time-frame. There are, however, indications that the current recessions will require much more than a quick restoration of consumer confidence in each country. For one thing, growth in real income in most major developed countries has been so low and for so long (see figure 1), that both the national savings and investment ratios have been sliding down, undermining the strength of recovery and future growth prospects. But, more importantly, the long slow growth has deprived these countries of the essential ability to implement structural adjustments without inviting in turn a major economic downturn. In the meantime, Governments in many of the countries have been effectively deprived of the use of fiscal and monetary policies to counter these recessions. Today, for instance, no major developed country, excluding Japan, is in a position to raise the aggregate level of demand through public spending. In a capitalist economy, an occasional recession is unavoidable, with the public being accustomed to government action to steer the economy out of recession. The public would surely become extremely wary if it realized that the economy was rudderless, or even steered with the wrong rudder, in the midst of recession: witness the recent sweeping phenomenon of corporate "downsizing" or "re-engineering" in the more advanced developed countries, which has promised to create millions of job redundancies in the name of enhancing international corporate competitiveness.

11. The prolongation of the current recession is therefore due to a generally lowered expectation for future growth held by both consumers and businesses in the more advanced developed countries, and to the fact that the same consumers and businesses are left to seek a "market solution" for their own problems as well as that of a global recession.

D. Lower interest rates and economic growth

12. In the name of controlling inflation, the world in the 1980s paid a steep price in growth and development. Not only did the average growth rate for the world as a whole drop, but the strain of having to cope with various problems of structural adjustment internally and between countries in a slow-paced global economy became quite unbearable. In many countries, the combination of slow growth and high real interest rates effectively discouraged investment in the real production sectors and production-related infrastructure, and encouraged financial speculation. The excesses of the 1980s led also to the ballooning of real estate prices, while the prices for manufactured goods and primary products kept easing domestically and externally. In both developed and developing countries, real wages generally failed to improve. Employment in developing countries increased steadily, but real wages declined continuously. In developed countries, however, the progress in productivity led to unemployment rather than to higher wages and income as capital share increased. With real income stagnant, developed countries have become increasingly protectionist, not only against cheap imports from low-wage developing countries, but against imports from one another. Foreign direct investment, used as a newly discovered instrument to circumvent actual and imagined trade barriers, inevitably resulted in duplicated production facilities all over the world, and caused excess world capacity, especially in the steel, automobile and electronics industries. In the meantime, more and more Governments kept becoming large debtors themselves, and by the time recession commenced, they were powerless and could not contain it.

13. Currently, inflation in the major developed countries remains at a modest 2 to 4 per cent per year. By August 1993, lower inflation expectations in the United States and the deficit reduction plan had pushed the yield on a 30-year United States Treasury bond to 6.2 per cent, down from 8.6 per cent in 1990, and 7.69 per cent in early November 1992. Given the 3.1 per cent consumer price increase observed in the second quarter of 1993, real interest rates in the United States have finally dropped below 3.5 per cent, and closer to the GDP growth of 2.3 per cent forecast by UNIDO for the United States in 1993. Thus for the first time in more than a decade, interest rate premiums on long-term industrial investment need not be double or triple the rates of return which the economy as a whole is capable of producing.

14. The successful lowering of long-term interest rates in the United States broke the international log-jam which had kept global interest rates so high for so long. It might have been genuinely the case that a belated realization by Germany of the seriousness of its own economic recession prompted its interest rate cuts. However, the decision to lower the German interest rate would have been impossible in the absence of the precedent set by the United States, especially without endangering the international standing of the deutsche mark. Most EC countries saw the need to lower their interest rates in the face of the worst recession since the 1930s but were constrained from doing so by the parity provisions of the exchange rate mechanism (ERM) of the European Monetary System. However in September 1992 Italy and the United Kingdom of Great Britain and Northern Ireland, were forced by the international financial markets to exit from ERM; consequently, their currencies were devalued and

their interest rates significantly lowered. As a result, signs of an end to recession and an economic turnaround, had by mid-1993 become clear in the United Kingdom. The financial markets continued pressure on the remaining members of ERM, with the result that by the end of July 1993 this pressure became almost unbearable, and ERM itself all but collapsed. It had become increasingly clear to the international financial markets during July 1993 that attempts to maintain some currencies, such as the French franc, within the prescribed parities of the unreformed ERM, were reminiscent of the linking of various major currencies in the 1930s to the Gold Standard, and similar economic damage was occurring. At the beginning of August 1993, the consensus in the markets was that almost all remaining countries of the ERM would reduce interest rates in a matter of weeks. As and when this occurs, EC countries will see their recessions coming to an end and a gradual return to growth.

15. During the same period, the share of United States dollar-based international lending soared from 60 per cent of all lending in 1990 to 86 per cent in 1991, and well over 90 per cent in 1992. The share of European currencies with relatively high interest rates fell sharply: the pound sterling, which made up 17 per cent of loans in 1990, contracted to a tiny 3 per cent, and Deutsche-mark-based lending, which constituted 4 per cent of international loans in 1990, almost disappeared by 1991. Yen-based loans, which made up 7 per cent of international lending in 1987, disappeared almost completely by 1991, however, for different reasons. Lower interest rates in the United States, therefore, had the effect both of halting finally and reversing the past trend of international interest rate hikes, and of providing the international community with a much-needed, single reference currency with a single reference interest rate. Since exchange rate risks are an important component of the overall cost of international capital, this was also a positive development for capital-importing developing countries. Many economists believe that declining interest rates could add 0.5 to 1 percentage point to United States economic growth in 1993. The impact on developing countries, especially to those with high external debts, could be considerably greater.

F. Prospect of trade diversion and global industrial realignment

16. Managed trade, in one version or another, looms large on the global scene: it is the spectre at the never-ending negotiations on the Uruguay Round of global trade talks. One reason why free trade had a rough ride in recent years stems from the persistently high unemployment figures observed in the more advanced developed countries. When the global economy is poised for an upswing, protectionist sentiment subsides and trade expands. This time around, however, some countries are determined to keep whatever fragile growth stimulus they have found or generated for themselves - to expand domestic output, and not to disperse it on imports. The United States, which bailed out the world economy in 1981 by opening the floodgate to foreign imports, is far less inclined this time to play the same locomotive role. Unlike in 1981-1982, the United States economic recovery starts with a large trade deficit and high unemployment. A fall in United States unemployment to 7.1 per cent in January 1993 indicated that the 4.8 per cent economic growth rate of the fourth quarter of 1992 was beginning to dent the high unemployment figures. The 106,000 newly created non-farm jobs constituted, however, only a third to a half of the monthly increase registered in previous recoveries. Manufacturing employment increased by 50,000 in the fourth quarter of 1992 to 1.75 million. But this was pale in comparison to the 200,000 manufacturing job losses registered in the third quarter of 1992 alone. On the other hand, the strong United States showing in the fourth quarter of 1992 has brought about a surge of imports.

17. Notwithstanding the diplomatic success of President Clinton at the Tokyo summit, held in July 1993, of the Group of Seven major industrialized countries and the optimism generated for a not-unsatisfactory completion of the Uruguay Round of talks under the General Agreement on Tariffs and Trade (GATT), the very significant change of Government in Japan in August 1993 adds a new element of uncertainty. The uncertainty may arise out of new differences of policy vis-à-vis Japan's major partners regarding development cooperation, trade and interest and exchange rates.

18. The United States currently runs a substantial trade surplus with the EC countries, postponing the need for a detailed sector-by-sector examination of United States trade with EC for the time being. The consequence of this surplus is that the main focus of the new United States trade policy has been directed towards Japan, China and other East and South-East Asian countries. The huge United States trade deficit with Japan has become a perennial problem for both countries and even for the world economy as a whole. In principle, bilateral trade imbalances, no matter how serious they might be, would be accepted by countries if their combined aim was to create a genuinely free multilateral trade system for the whole world. Japan has been underlining its traditional stand for a globally integrated, against a regionally based, trade system, and "rule-based", against "results-oriented", trade policies - the approach the United States intends to use to pry open Japanese markets. Japan's advocacy of adherence to free market and free trade principles is based on more than just pure ideology. Japan imports raw materials and exports finished products, which requires a multilateral global system of trade balances as a basic precondition. With only a difference in degree, the situation is common to all countries, including the United States. However, for the time being, the world is definitely headed for a heterogeneous trade balance and multilayer clearance system, in which the trade surplus of Japan vis-à-vis the United States in particular is expected to decline.

19. In 1993, China is expected to become one of the "top 10" exporting countries in the world. The extraordinary export growth of China, especially vis-à-vis the United States, has placed the China-United States trade relationship in a much similar situation to the Japan-United States trade relationship. While the United States is demanding trade liberalization from China and

improved access to its markets, China still sees early GATT membership as one way of dealing with bilateral pressures from its main trade partners including the United States. In sharp contrast, most of the East and South-East Asian countries, long accused of trade malpractices, have gone ahead by diverting their trade from the United States and focusing increasingly on their own geographic region. Intraregional trade among the Asian countries has been growing since the mid-1980s. The pace has, however, accelerated since 1989, when the United States growth rate started declining, and with it the build-up of pressure by the United States to reduce their bilateral trade surpluses. In 1992, of the $487.7 billion combined export figure of nine Asian developing economies, 1/ $144.5 billion or fully 30 per cent of it consisted of exports to each other, while $105.3 billion or less than 22 per cent of their combined exports went to the United States. In contrast, the United States used to provide 31 to 33 per cent of the total export market share for these Asian countries at a crucial stage of their export-driven industrial development during the 1980s. The need for growing South-South trade argued in Global Report 1985 2/ seems to have been recognized in practice at last.

20. Nevertheless, one consequence has been that the United States has been running declining, but persistent, bilateral trade deficits with most of the East and South-East Asian developing economies. These deficits combined stood at $31 billion or almost 47 per cent of total United States global trade deficits in 1991. With the exception of China, these economies have been running deficits with Japan, amounting to $32.5 billion in 1991 and equal to just under a third of the global trade surpluses of Japan in that year. Quite clearly industrialization in the developing Pacific Rim countries has changed the pattern of trade and investment flows among countries in the region. Figure 3 is a simplified sketch of how the pattern of trade and investment among some of the Pacific Rim countries has changed from around 1980 to the present, and how it seems likely to evolve during the rest of the decade. Figure 3 shows the strategic role that Asian countries have been assigned and have come to play so effectively in the triangular industrial relationship of production, specialization and trade with the United States and Japan. This industrial relationship, in as much as it has been mostly uni-directional in product flow, has been aberrational. It also had its ultimate limit in the willingness of the United States to accommodate it. The message is now clear, or has been for some time, that the limit has indeed been breached.

21. Even when the United States trade balance becomes lopsidedly favourable, overconcern for domestic employment persists. United States exports to Mexico have grown from $12 billion in 1986, when Mexico began reducing tariffs, to $44 billion in 1992. The North American Free Trade Agreement (NAFTA) will eliminate tariffs on most trade between the United States, Canada and Mexico, creating the world's biggest trading bloc. With a host of young, well-trained workers willing to work for $60 a week, Mexico provides the United States and Canada with a practicable alternative to the triangular industrial relationship and the production arrangement involving the South-East Asian countries as shown in figure 3. Access to cheaper labour is, however, not a priority goal of the United States for the time being. All the same, there is the danger of repeating the mistakes made by Germany in its transition after reunification, where wages in the eastern portion were artificially increased and the environmental and labour standards drastically raised before the pool of relatively cheap labour could effectively be absorbed and utilized for the benefit of all. This being said, it is still no more than a question of time before NAFTA, in one version or another, or even in its expanded version including other Latin American countries, is expected to come to pass.

G. Income gap between developed and developing countries

22. Many developing countries possess an absolute advantage in cheap labour; and with increasing mobility of capital, the cost of capital tends to converge world-wide. If prices of traded goods were equal everywhere, then wages and income in each country should converge. Thus, the idea that poorer countries with low wage labour should catch up on richer ones through trade is as old as the theory of international trade itself. That convergence in income has somehow failed to take place between developed and developing countries - having mainly occurred among developed countries up to now - is usually taken as an indictment against the existing system of global trade. If this were indeed the case, there are several possible explanations for it. For instance, either the developing countries do not really possess cheap labour or the prices of traded goods are not equal everywhere, or perhaps such convergence takes much longer than the economic theorists have foreseen.

23. Another possible explanation relates to the two-layer structure of price determination involving developing-country exports. Producers of exports in developing countries compete essentially among themselves within a narrow margin assigned by the vertical chain of price determination dominated by distribution and marketing costs. The pursuit of high value-added content through production has its ultimate limit in factory-gate prices. Developing countries should realize sooner rather than later that industrialization under globally linked production and trade entails expertise not only in production but also in finance, marketing, shipping and trading. In a way, the existing income gap between developed and developing countries is more apparent than real. In a recent issue of its World Economic Outlook, the International Monetary Fund (IMF) used purchasing-power parities, rather

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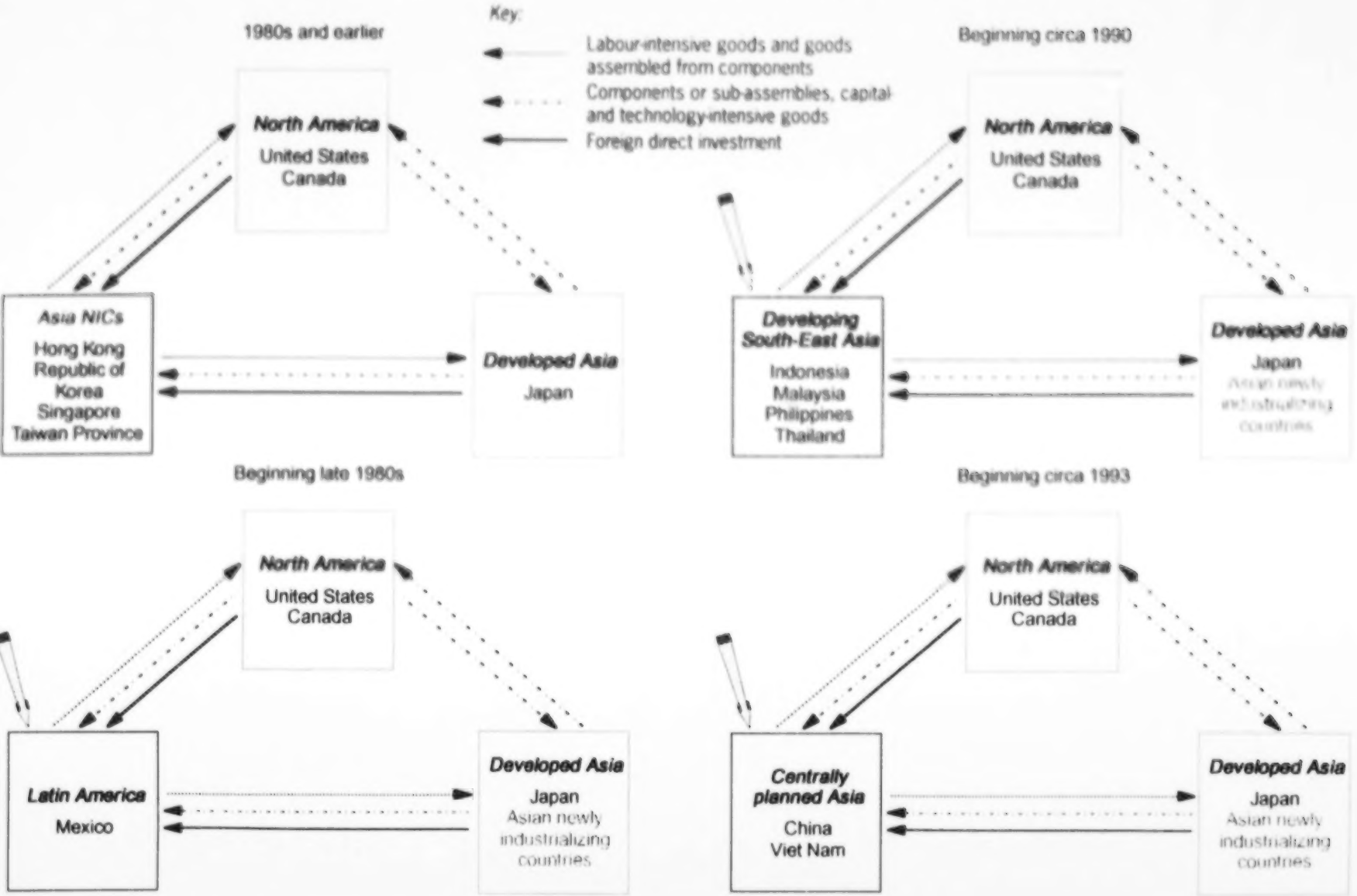
1/ Including China, Hong Kong, Indonesia, Republic of Korea, Malaysia, Philippines, Singapore, Taiwan Province and Thailand.

2/ Chapters III and IV.

Figure 3. Changing partners and changing roles in the Pacific Rim trade and investment triangle: 1980-2000



than market exchange rates, to recompute GDPs. 3/ The result is a sharp increase in the developing-country share of world GDP from 18 per cent to 34 per cent. By contrast, the share of developed countries dropped from 73 to 54 per cent. This is clearly due to the enormous price spread between developed and developing countries - a spread reflecting the value added in the service industries, including trading. Moreover, there is also overwhelming evidence that those developing economies which climbed the income ladder rather quickly happened to be all active traders (two of them, Hong Kong and Singapore, incidentally joined the exclusive club of developed countries in 1993, according to the World Bank). In contrast, many African countries do not trade extensively, and whatever is traded is mainly through international trading agents.

24. Up to half a century ago, industrialization provided the base for trade expansion. In modern days, however, industrialization has always been preceded by the opening up of new trading opportunities. The Asian newly industrializing countries (NICs) clearly provide an example of a rapid take-off in the mid-1950s based on export-led industrialization, as did China in the 1980s. "Trade rather than aid" is the urgent appeal from the countries of Eastern Europe and the former Soviet Union, anxious to restart their interrupted industrialization process. The importance attached to trade by these countries clearly reflects the fact that the essence of industrialization for developing countries today consists as much in an enhanced production capability of traditional and domestic goods, as in the acquisition of know-how in technology, design, manufacture and marketing at all levels of distribution for new products which are demanded by the world at large.

II. INDUSTRIAL PERFORMANCE AND PROSPECTS IN THE MAJOR REGIONS

25. Several general factors are driving overall change in the global industrial economy. One is that technological change has perhaps never been greater than at present; advances in computers and electronics in particular are rapidly lowering costs of communication, information and control. Liberal, market-based economic policies have spread to all corners of the globe, allowing greater scope for the private sector. Industrial enterprises are being forced to restructure in terms of production platforms, management, employment, finance and linkages among themselves, merely to remain competitive in a world where large profits one day can vanish the next.

26. But short-term regional differences seem as great as the common factors. The current performance of both Western Europe and Eastern Europe, including the new States that emerged from the breakup of the former Soviet Union, is disappointing. In the latter region, the introduction of market-based economic structures has proved much more difficult than had originally been hoped for. Although great changes are under way and much has been achieved, industrial decline continues in 1993 for all but a few countries in this region. In Western Europe, prospects have been sharply downgraded since about the third quarter of 1992, when doubts arose about approval of the Treaty on European Union (the Maastricht Treaty), the exchange rate mechanism partly broke down, and the high costs of German reunification, especially in terms of inflation and the budget, became apparent. In August 1993, continued uncertainties brought about the effective discontinuance of ERM, at least temporarily. The expected positive impact of the introduction of the single European market in January 1993 seems hardly noticed.

27. In early 1993 it seemed that North America was emerging from recession and would be able to take over as "world locomotive" as Western Europe, and Germany in particular, went into decline. But recovery in North America has remained weak, as the new United States administration attempts to implement new policies. A compromise budget package was passed by Congress in the third quarter, but its impact is still not clear. Recovery in Japan, which was expected to be fuelled by fiscal stimulus, has so far also remained weak, especially since recent strengthening of the yen has reduced export competitiveness. Thus none of the major economic actors have been able to provide much push for the global economy, which is particularly worrisome in view of the continuing failure to reach final agreement on the GATT Uruguay Round of trade negotiations.

28. Short-term prospects for the developing regions are far better, particularly for the East and South-East Asian region, which continues to benefit greatly from a strong nexus of industrial trade and investment ties within the region and between the region and Japan, and now including China. Low-cost labour only partly explains this growth phenomenon. Sound macroeconomic policies have encouraged investment, rapid technological change and expansion of manufactured exports. Similar policies were adopted in the 1980s in much of Latin America and the Caribbean in the wake of the debt crisis, and more recently in India, and manufacturing output and exports are responding. Even in tropical Africa, subject to so many disadvantages, the small manufacturing sector is expected to grow at about 3 per cent annually in the period 1993-1994. Projected regional growth rates are given in table 1.

29. Regional shares in 1993 in world MVA, for total and individual industrial sectors, show that by far the biggest changes in the distribution of the total, compared to 1975 distribution, are the increase in the share of Japan to 16.6 per cent

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3/ The use of purchasing-power parities to compare living standards in different countries has drawbacks as serious as the use of exchange rates. Living standards or even the level of income should be measured by the availability of choices in, as well as the affordability of, a vast range of goods and services. A pound of beef in a supermarket displaying 3,000 other well-packaged food items is different from the same offered by a street vendor. Income measured by price differentials on a few strictly selected items available to all countries including the poorest necessarily ignores the choice aspect, which is, after all, the main ingredient of high income. (See Global Report 1990/91 for a more detailed discussion on this subject.)

and the sharp drop of Eastern Europe and the former Soviet Union to 7.0 per cent. The share of North America increased slightly, to 28.3 per cent, and that of Western Europe remained unchanged at 31.3 per cent. Thus despite rapid growth in East and South-East Asia, the three most developed regions continue to account for more than three quarters of world MVA, largely due to the continual dominance of these regions in the capital- and technology-intensive sectors, such as machinery, electronics, transport equipment and chemicals, which constitute the bulk of world manufacturing. Over the period 1980 to 1993, the highest MVA growth rates were achieved by China (10.7 per cent), South and South-East Asia (8.2 per cent), Indian subcontinent (5.6 per cent) and North Africa and Western Asia (4.5 per cent) and the lowest by Eastern Europe and the former Soviet Union (-1.8 per cent) and Latin America and the Caribbean (-0.1 per cent). The industrial outlook for the three most developed regions - North America, Japan and Western Europe - is examined below. The companion paper on international economic change and the industrial development of the developing countries (GC.5/15) provides an extensive discussion of the five developing regions, plus China and Eastern Europe and the former Soviet Union.

A. North America

1. Short-run outlook

30. In North America GDP grew by 2.0 per cent in 1992, following a 1.2 per cent decline in 1991. According to the UNIDO forecast, the recovery will continue through 1994, with GDP growth of 2.4 and 3.0 per cent in 1993 and 1994 respectively. The recovery has been less robust than that following most other recessions since the Second World War, in part because the recession itself was mild. The need to raise taxes and check spending to trim the federal deficit has also retarded the recovery. The new United States administration has won approval of a budget plan to significantly reduce the budget deficit, by up to $100 billion per year over the next five years. Canada too has put in place a combination of spending cuts and tax increases to reduce its budget deficit.

31. The progress of recovery in the United States has been uneven. The recession ended in a technical sense when GDP growth turned positive in the second quarter of 1991. But growth during the remainder of 1991 remained low, and the result for the year was a 1.2 decline in GDP. Growth remained low in the first half of 1992, before rising to 3.4 per cent in the third quarter and 4.8 per cent in the final quarter. It then fell to 0.7 per cent in the first quarter of 1993. While growth appears to have recovered somewhat at mid-year, the recession in Europe and low growth in Japan will affect the recovery in the United States.

32. The growth of MVA in the United States improved from -2.2 per cent in 1991 to 3.1 per cent in 1992. In Canada it increased from -6.6 per cent in 1991 to 0.5 per cent in 1992. Two problems that the manufacturing sector in the United States will have to overcome in 1993 and for the next few years are cut-backs in defence spending and a slow-down in the growth of exports. Export growth will slow as a result of the slow-down in growth in the rest of the world in 1993. Exports of manufactured goods make up a little over half of total merchandise exports. Some 60 per cent of defence industry workers are engaged in manufacturing, and between 1992 and 1995, defence cuts will result in some 250,000 net jobs lost per year. During 1993, the fall-off in exports may be the more serious problem. The NAFTA treaty, which would eliminate most trade barriers between Canada, United States and Mexico, would provide an impetus to exports, but its ratification by the end of 1993 is still uncertain.

2. Longer-term prospects

(a) Cutbacks in defence spending

33. Cuts in defence spending will result in dislocations in United States industry for the next five years. Defence spending cuts are like any other structural adjustment, which requires time and a certain amount of economic resilience for resources to be transferred to other productive activities. Adjustment is apt to be slow, however, because of the magnitude of the decline and the fact that some of the resources used in the defence industry are specialized and not so easy to relocate to the civilian sector. For example, over the 10 years from 1986 to 1996, defence cuts will increase the supply of civilian aircraft assemblers by over 50 per cent and the supply of aeronautical and astronautical engineers by nearly a third. Some occupations are not limited to defence industries, and the effects of defence cut-backs may not have much impact. In the specialized occupations of aircraft assemblers and aeronautical and astronautical engineers the impact will be severe. Unless the non-defence aerospace industry greatly expands, workers who lose defence jobs in these occupations will have to embark on new careers. The losses run up by United States airlines over the last few years and the increased share of the civil aircraft market held by European builders do not bode well for an offsetting expansion of the United States aircraft industry. However, a more positive aspect of defence cut-backs, the peace dividend, should have both short- and long-term positive effects. In the case of both Canada and the United States the peace dividend has made it much easier to implement deficit reduction programmes and should make budget targets attainable. Lower long-term interest rates and increased investment may result.

(b) Productivity and manufacturing wages

34. During the 1970s and 1980s growth of business productivity in the United States lagged behind that in most other industrial countries, and well below the long-term trend for the United States. The service sector was particularly hard hit by the slow-down in productivity growth. But in the 1980s not only was productivity growth slow, but wages grew more slowly than productivity. One of various factors that have lowered productivity growth is the decline in the output share of manufacturing, which has consistently had a higher rate of productivity growth than the rest of the business sector. Accompanying the slow-down in productivity growth was an increase in wage dispersion both in the economy as a whole, as workers moved from manufacturing into services as well as within manufacturing. While the phenomenon of growing wage inequality is not new, it has accelerated over the last decade. One explanation for the phenomenon might be the

relative decline in the share of manufacturing in GDP, but manufacturing has also exhibited a declining demand for lower-skilled labour over the last three decades.

(c) North American Free Trade Agreement

35. Despite some popular opposition in all three countries, Canada, Mexico and the United States signed the North American Free Trade Agreement in December of 1992. NAFTA expands the free trade area consisting of Canada and the United States to include Mexico. If it is ratified by the legislatures of the three countries, it will take effect on 1 January 1994. At that time the three countries will remove most quantitative restrictions, such as quotas or import licensing requirements, on imports from the other NAFTA members. Some quantitative restrictions will be simply abandoned, while others will be converted to tariffs which will be eliminated over a period of 5 to 10 years in most cases. Since trade-weighted tariffs are already low between Mexico and the United States, the removal of non-tariff barriers will give trade an immediate boost. Mexican tariffs on goods imported from the United States are approximately 10 per cent on a trade-weighted basis, and the corresponding figure for the United States is about 4 per cent. Sectors where full implementation will stretch out over 10 to 15 years include some agricultural products, textiles, steel and financial services. "Side agreements" reached in 1993 pertain to worker conditions, environment and dispute mechanisms.

B. Japan

36. The Japanese economy appears to be following a path of gradual upward movement after the sharp decline in economic growth in 1992. The after-effects of the punctured bubbles of asset inflation distinguish this from earlier recoveries. Banks have become more careful in lending as a result of the mass of non-performing loans related to land and stock speculations. Consumers seem to have lost confidence, while enterprises have been hit by profit falls and uncertain sales prospects, and trade disputes with the United States and further yen appreciation cloud the near-term picture. Positive thrusts for growth however, are coming from strong export demand in the Asia-Pacific Basin, from signs of economic recovery in North America and from the government fiscal stimulation package. The stimulus package consists of $90 billion of additional government spending, mainly on infrastructure projects. Because government debt in Japan is low, the increase in spending is not likely to have any adverse effects on business or consumer confidence, as such deficit spending measures might have in many other Organisation for Economic Cooperation and Development countries. On the other hand, $90 billion is small in relation to the size of the Japanese economy, and is meant only to help initiate recovery and restore confidence. The Government is clearly relying on private investment as the main engine of growth. Intermediate and long-run prospects appear good, especially because of proven techno-industrial prowess in the capital goods and engineering-intensive sectors.

37. In 1992, GDP grew by only 0.8 per cent, compared with 4.4 per cent in 1991 and 5.2 per cent in 1990. A GDP growth rate of 1.1 per cent for 1993 and 2.5 per cent for 1994 is foreseen as likely. MVA declined sharply in 1992 (-6.2 per cent). The decline should slow in 1993 (-0.8 per cent), and growth of 1.8 per cent is expected in 1994. Led by industries such as electrical and non-electrical machinery, transport equipment and chemicals, MVA grew by an average of 3.6 per cent during the period from 1980 to 1990. During the period from 1990 to 1992, however, declines, averaging -0.9 per cent, were recorded in most industrial branches. Only 10 out of 28 industries achieved positive growth. During 1990-1992 the industries that experienced the sharpest declines in output were industrial chemicals (-7.7), leather and fur products (-6.5), wood and cork products (-5.2), glass and glass products (-5.4) and non-electrical machinery (-5.6). Partially offsetting declines in these industries were large increases in output in petroleum refining (27.8), miscellaneous petroleum and coal products (17.5) and tobacco manufactures (11.2) industries. All three of these industries are ones in which output declined during the 1980s. The share of MVA in Japanese GDP stopped growing as of 1991, and since then labour productivity and manufacturing employment have also fallen.

38. A medium-term (1992-1997) projection for annual growth in various industries indicates a return to higher growth. The leading industries include electrical machinery (5.4 per cent), general machinery (4.7 per cent), precision instruments (3.9 per cent), chemicals (3.6 per cent) etc., although transport equipment provides the exception (only 1.3 per cent).

39. The relatively weak recovery process indicates that the aggressive investment experienced from 1988 to 1990 is not likely to be repeated in the near future. It should be recalled that the economy recorded double-digit investment growth for plant and equipment for three years consecutively - namely, 16.3 per cent in 1988, 14.3 per cent in 1989 and 11.2 per cent in 1990. Then in 1991 the rate fell to 2.7 per cent followed by -4.6 per cent in 1992. According to a sample survey by the Kogyo Bank, the growth rate of investment for plant and equipment will continue to be negative in 1993. The collapse of asset prices in 1992 reduced the ability of enterprises to borrow on collateral. Excess production capacity and accumulated inventories coupled with sluggish consumer demand (1.2 per cent and 2.4 per cent growth estimated for 1992 and 1993, respectively) all tend to erase needs to add capacity. The ability of Japanese banks to provide investment finance has also weakened; average return on equity of major banks dropped from 9.9 per cent in 1990 to 5.9 per cent in 1991, and to 4.8 per cent in 1992.

C. Western Europe

1. Short-run outlook

40. Optimistic growth expectations for most of Western Europe were revised sharply downwards from mid-1992. In particular, Germany ceased to be the "engine of growth" for the region, and sudden troubles related to exchange rate coordination, including devaluation of many European currencies against the deutsche mark, created widespread market uncertainty. For most of the region, GDP growth ceased or became negative in 1993, and in the EC countries unemployment is expected to rise to about 12 per cent of the workforce.

Manufacturing has suffered more than service industries; even major companies are reporting sharply lower sales and profits.

41. Growth of regional GDP, 1.2 per cent in 1992, is expected to become negative in 1993, at -0.3 per cent. But for recovery in the United Kingdom after two years of declining GDP, the regional average in 1993 would be even worse. Starting with Germany, where GDP growth is expected to drop to -1.7 per cent in the western part of the country, economic slow-down spread swiftly throughout the region. However the recession is expected to be short-lived. Recovery is forecast for Western Europe in 1994, with GDP growth rising to 1.9 per cent on the assumption of lower inflation and interest rates, especially in Germany, and greater currency stability.

42. The share of manufacturing in regional GDP is continuing to decline. With MVA growth of -2.8 per cent forecast for 1993, Western Europe is expected to register its fourth consecutive year of declining MVA. Economic recovery forecast for 1994 is expected to boost regional MVA growth for the year to 1.1 per cent, still below that of GDP. High wages and non-wage benefits are apparently eroding industrial competitiveness in much of Western Europe. Major industries such as automobiles and electronics are suffering currently from high operating costs, so that companies are shedding labour and seeking lower-cost production sites. German automobile manufacturers, for example, are increasingly looking towards eastern European bases for the supply of parts and assembly. Small cars may soon be produced only in eastern or southern European countries. Wage differences, such as a 1:6 ratio between the Czech Republic and neighbouring Bavaria, are providing a strong incentive to relocate.

43. Germany nevertheless accounts for the largest share of regional manufacturing, 35 per cent as of 1990. France, the United Kingdom and Italy accounted together for another 39 per cent. Production of non-electrical and electrical machinery and transport equipment dominate regional manufacturing. Together these industries accounted for one third of 1990 regional MVA.

2. Delays in forming a single European market

44. Until about mid-1992, movement towards a greater European polity and economy within a few years did not seem in doubt. The Single European Act of 1987, which was designed to remove inconsistencies in economic and business regulations and practices within EC by the beginning of 1993, had been agreed. And the Maastricht Treaty, signed in early 1992, outlined a wide range of changes that would greatly strengthen efficient decision-making within EC, including a common currency (by 1999 at latest), convergent fiscal policy and EC-wide business law and regulations. Widening of EC, that is, adding new member countries, was also being negotiated. At mid-year, a referendum in Denmark went against the Treaty, reinforcing doubts in several EC countries about greater central authority, and leading to the chaotic changes in the EC exchange rate mechanism starting in September 1992 (several countries devalued or dropped out of ERM). The problem was exacerbated because the German Bundesbank decided that it could not lower interest rates because government spending on rehabilitation in the eastern part of Germany was threatening to cause higher inflation. Plans for a common European currency by 1999 now seemed optimistic at mid-1993, and continued pressures on the ERM threaten its existence. Meanwhile, in major countries such as Italy, France and the United Kingdom, as well as Germany, political pressures were weakening government policy options. As of writing, in France the presidency and the Government are once again divided along party lines, in Italy political corruption accusations have led to a complete reorganization of the system of Government, and in Germany the east-west problem, inflation and the budget deficit are pushing other issues aside in political debate.

3. Longer-term prospects

45. Once Western Europe has recovered from the economic shocks caused primarily by German unification and the negative outcome of the first Danish referendum on the Maastricht Treaty, and has reconstructed ERM, the delayed process of EC deepening and widening will help to bring the region back to a positive growth track. But prospects for manufacturing in the region are not particularly good. Too much of industrial production remains in "sunset" industries such as steel, innovation and productivity growth tends (with significant exceptions) to be lower than that of major competitors (especially those from East Asia), and labour costs are relatively high (for example, China now produces simple manufactures at a small fraction of Western European costs). One result of declining competitiveness has been that EC manufacturing exports to non-members, as a share in world manufacturing exports, has declined steadily from over 22 per cent in 1980 to under 18 per cent in 1992.

46. As mentioned earlier, the share of MVA in regional GDP has been declining. This trend should continue, with production involving low technology and low skills being encouraged to relocate to low-cost areas within the region or to Eastern Europe or to developing countries. The future of manufacturing in Western Europe needs to be based on carefully selected, lean, efficient production of high-technology products based on high-skill technologies, in other words, on the region's dynamic comparative advantages. A consequence of this prospect will be, unfortunately, that manufacturing will provide fewer jobs for unskilled labour; rapid growth in service industries will therefore be needed.

III. TRADE AND INDUSTRIALIZATION

47. This chapter focuses on the role of international trade in industrialization, and the extent to which the experience of the Asia-Pacific model of export-led industrialization is relevant to industrialization strategy in sub-Saharan Africa. The chapter concludes, inter alia, that trade can be a very powerful instrument of industrialization and economic development, provided that certain important preconditions are met. In particular, the Asia-Pacific model of export-led industrialization characterized by the export-linked secondary import substitution has

proven very effective in accelerating industrialization in the last two decades.

48. Emerging from the first phase of import substitution in the decades of the 1950s and 1960s, these countries shifted to the export drive in the decades of the 1970s and 1980s, initially concentrating on the natural resource-based or labour intensive products such as food processing, textile and garments, rubber products and electronic assembly. The competitive export industry is built on foreign technology often linked to foreign direct investment (FDI). The rapid increase in FDI is followed by a rapid increase in the imports of intermediate and capital goods from the supplier countries of FDI. As imports of intermediate and capital goods become essential for sustaining the export-led growth, these countries launched the second phase of import substitution strategy, this time focusing first on the domestic production of technologically less demanding intermediate goods and then on the technology-intensive capital goods through learning-by-doing and other policy measures of upgrading technological capacity. The second phase of import substitution has in turn broadened the industrial base, deepened domestic interindustry linkages, and improved technological capacity.

49. Empirical results obtained from an input-output analysis of the structure of trade and a decomposition analysis of the sources of the industrial growth in Asia-Pacific countries confirmed the primacy of manufactured exports in accelerating industrialization and the strategic importance of import capacity and its stability to sustain the export drive. Manufactured exports accounted for nearly 50 per cent of manufacturing output growth in Malaysia, 83 per cent in Singapore, 34 per cent in the Republic of Korea, 29 per cent in Thailand, 25 per cent in Japan, 21 per cent in the Philippines, 15 per cent in Indonesia and 12 per cent in the United States in the period 1975-1985.

50. It is widely accepted that certain prerequisites may have to be met before launching an export-oriented industrialization (EOI) strategy. First of all, industrial supply capabilities need to be built up, usually by providing a period of protection for so-called "infant industries" in the domestic market. Almost every successful exporter started with import substitution of light consumer goods. The rationale for the infant industry argument is that the period of protection is provided to increase technical efficiency and the competitive edge in the world market. Building blocks for industrial supply capabilities include many interrelated aspects of development that are not directly related to trade and precede the design of a policy framework for export promotion. For instance, the basic physical infrastructure - transport, communications, water, gas and electricity, etc. - is essential to manufacturing. On the intangible side, human capital accumulation and skill improvement through education and training along with the creation of an entrepreneurial class are equally, if not more, important. Closely related to human capital accumulation is a concomitant development and continuous upgrading of technological capacity to assimilate the latest technology, and to enhance product design capacity through institution building for science and technology. Institution building should also focus on the strengthening of administrative capacity along with a corps of competent technocrats.

51. In general, most of these basic building blocks for manufacturing capacity do not seem to exist in sub-Saharan Africa. The Asia-Pacific model of EOI strategy is simply not replicable at the early stages of industrialization in which sub-Saharan Africa finds itself today. It seems evident, therefore, that in sub-Saharan Africa, the role of manufactured exports as an instrument to push industrialization becomes less important than non-trade policy measures such as selective industrial targeting and nurturing of infant industries, agricultural development and rural industrialization, strengthening domestic linkages between agriculture and manufacturing, promoting infrastructure development and institution building. The relative efficacy of the EOI strategy may vary in time and place, depending on the initial conditions and the level of industrialization of a country in question. In sum, industrial productivity is an engine of growth and exports are a catalyst for industrial growth. Moreover, in recent years, foreign direct investment by transnational corporations has been increasing sharply to such an extent that total sales by transnational corporations outside their countries surpassed the total world exports. From the perspective of developing countries, foreign direct investment seems to matter equally, if not more, than trade as an instrument to accelerate industrialization.

52. Another important question raised in this chapter is the universality of free market and free trade principles across economies regardless of the level of industrialization, and social and economic conditions. Is "getting the prices right" the best policy for industrialization and development? Obviously, a correct price signal alone may not be sufficient to induce and sustain the growth of industrial output without adequate physical infrastructure and socio-economic institutions. Thus it is argued that the scope for state intervention seems to depend on the stages of industrialization. At the initial stages of industrialization, where there are no functioning markets, state intervention may be quite extensive. Public investment in infrastructure and institution-building has to be undertaken and industrial development guided, given the inability of the private sector to mobilize financial resources to undertake large investment. The scope for such intervention should diminish progressively while the market plays increasingly a greater role in guiding the process of industrialization as the industrial structure becomes mature and complex.

53. The question is not whether the state intervention <u>per se</u> is good or bad, what matters most is the nature and quality of intervention. The outcome of intervention will not only depend critically on the objective of intervention, for instance, inward- or outward-oriented industrialization, but also the capability of the state to initiate and guide structural transformation leading to the functioning of free markets. In the past, active policy interventions in the East Asian countries were targeted at the creation of competitive export industries and an outward-oriented economy <u>after</u> the initial phase

of import substitution. This transition was facilitated by the development of an efficient government bureaucracy which was capable of ajudicating between the competing demands of vested interest groups and disciplining various economic actors to implement technocratic policies. In many other developing countries, state intervention was equally active but often failed through misdirecting efforts towards unsustainable strategies such as inward-looking industrialization. Such failures were compounded by the problems of weak government capacity to pursue coherent policies.

54. Like market reforms, the impact of trade liberalization may also vary considerably from country to country, depending on the country's level of industrialization. For instance, for a small undiversified economy with a small manufacturing base, trade liberalization may soon become untenable because of a surge of imports leading to a foreign exchange crisis. In many cases it may be more rational to introduce import liberalization after domestic manufacturing capacity has sufficiently developed and a successful export drive launched. To be more specific, trade liberalization may be achieved in step with the progress of the export drive through a combination of time-phased relaxation of import controls, selective opening of domestic markets for foreign suppliers, rationalizing tariff structure, establishing realistic real exchange rates, more transparent effective protection via tariffs rather than quantitative restrictions, etc. In this manner, the foreign exchange squeeze can be avoided by growing export revenues paying for the imported inputs needed for increased exports of manufactures. Thus, a proper sequencing of policy reforms is critically important to the EOI strategy. Nevertheless, there is no universally applicable approach to the sequencing of policy reforms. The optimal design and sequence is country-specific and may vary considerably across countries, depending on the initial conditions, and especially the degree of political commitment to reforms and administrative capacity to implement reforms.

55. Despite considerable intercountry variations, the following broad boundary conditions for sequencing may be suggested. First, apart from the crucial importance of basic infrastructure, considerable manufacturing capacity must be developed before building an export base. At the same time, macroeconomic stabilization is essential to create a favourable macroeconomic environment for rapid industrial growth. In many cases, macroeconomic reforms should precede structural reforms including trade reforms. Moreover, import liberalization should be introduced well after the upsurge of manufactured exports. Finally the liberalization of financial and capital markets should be sequenced after trade reforms in order to gain some degree of control over international capital flows. This is essential in an orderly transition to an export-oriented economy and in maintaining stability in financial and capital markets.

56. For most countries of sub-Saharan Africa, the set of formidable external and internal constraints to industrialization that has to be overcome includes crushing debt burdens and crippled import capacity; the overwhelming dependence on commodity exports and a narrow specialization in a few commodity exports to a small number of countries, and the consequent instability and secular decline in export revenues and foreign exchange squeeze; infrastructure bottlenecks in areas such as transport, communications, water, gas, and electricity; acute shortages of managerial and entrepreneurial skills, and skilled labour; inadequate administrative capacity, weak technological capacity, and the embryonic development of economic and social institutions such as financial and capital markets, legal systems and other supporting technical services. Under these external and internal constraints, the strategy options open to sub-Saharan Africa seem to be very limited. The following points must be taken into account in formulating a viable strategy for industrial revitalization in sub-Saharan Africa.

(a) The onerous debt burdens of sub-Saharan Africa must be substantially alleviated. The debt overhang has caused a severe import compression of vital manufactured inputs and contributed to widespread capacity underutilization, thus nipping in the bud small manufacturing industries developed in this region;

(b) It must be recognized that the promotion of manufactured exports catering to world markets as a major vehicle for accelerating the pace of industrialization in this region is for the most part beyond the realm of feasibility for sub-Saharan Africa in the short and medium terms;

(c) Despite downward trends for commodity prices, sub-Saharan African countries have no other alternative but to expand traditional commodity exports to earn foreign exchange for industrial finance;

(d) Resource-based industrialization should be consistent with the operational and technological constraints of an economy. In this regard, the development or revitalization of agro-processing industries is to be encouraged, while mineral processing is to be postponed until such a time when a broad manufacturing base is firmly established, because of its high technological requirements, scale economies and capital intensiveness;

(e) In the light of rapidly growing FDI whose economic significance may soon equal that of trade, it is essential to seek actively FDI in light manufacturing for both import substitution and exports. Given the region's considerable competitive disadvantage in attracting private capital, concerted efforts must be made to find ways and means to channel part of ever-growing international FDI to this region through international cooperation, and particularly multilateral and bilateral technical and financial assistance, to create a favourable competitive environment for FDI from all sources including newly industrializing countries in East Asia and Latin America;

(f) Successful industrialization in sub-Saharan Africa will depend critically on other factors that are not directly related to trade such as the build-up of industrial supply capacity. In this context, the development of physical infrastructure and human capital, institution-building, rural industrialization and the strengthening of manufacturing linkages with agriculture, and with the rest of the economy is of paramount importance.

57. Although each export success story based on the selective interventionist approach, particularly in East Asian countries, has more to do with unique country experiences than general characteristics of trade policy and market reforms, some aspects of the Asia-Pacific experience may offer broad lessons for sub-Saharan African policy makers, including the following:

(a) Sub-Saharan African countries may gain some insight by examining carefully the transition phase of development from being an exporter of commodities to a exporter of manufactures, and particularly the strategy of nurturing light manufacturing under protection first and subsequently promoting its exports while sustaining traditional exports at the same time as certain Asia-Pacific developing countries such as Indonesia, Malaysia and Thailand have done;

(b) Almost all successful manufactured exporters started with import substitution of light manufacturing under protection. The key element in the infant industry argument is a relatively quick transition of protected industries producing for domestic markets to exports. Such transition in many Asia-Pacific countries was completed in a relatively short period of time. Many factors are responsible for such rapid transformation. It may be worth while for sub-Saharan African policy makers to examine carefully the Asia-Pacific experience in order to gain a better understanding of the political economy of protection;

(c) At the early stages of industrialization, and closely related to it, is the quality of state intervention. A high quality of state intervention is essential to structural transformation leading to the eventual functioning of market systems. In this regard, particularly early East Asian experience may provide valuable lessons, if carefully adapted to local conditions, for sub-Saharan African policy makers who endeavour to upgrade the quality and effectiveness of public administration and strengthen technocratic capacity to direct the overall economic transformation;

(d) Given the paucity of managerial and entrepreneurial skills coupled with relatively weak technological capacity in sub-Saharan Africa, foreign direct investment may be one effective way to build a manufacturing base for import substitution and exports. The Asia-Pacific experience may offer some useful lessons for sub-Saharan policy makers in this area;

(e) A wide array of export promotion measures and machineries developed in various Asia-Pacific countries may offer a broad menu from which to choose a set of export instruments suited to the needs and conditions of a specific country in sub-Saharan Africa;

(f) Finally, sub-Saharan Africa may benefit from a systematic comparative assessment of export-led industrialization strategies in general and the design and sequence of policy reforms in particular in various Asia-Pacific countries. However, great caution must be exercised in drawing lessons for sub-Saharan Africa from the Asia-Pacific region's dynamic industrial growth, particularly in view of enormous institutional variations across countries in terms of the political commitment to policy reforms and the organizational capacity to implement them.

IV. A SURVEY OF SELECTED MANUFACTURING INDUSTRIES

58. Thirteen comprehensive industry surveys are presented in the present chapter. Five of these analyse the primary processing industries. Included among food and wood processing are cocoa processing (ISIC 3119), seafood processing (ISIC 3114), and market pulp (ISIC 341101-34116). The mineral resource-based industries selected are copper processing (ISIC 3720041) and petrochemicals (ISIC 351103-351130, 35131). These are followed by surveys of intermediate goods industries with a high-technology content. Included are fine chemicals (parts of ISIC 3512, 3522, 351102), higher value-added steel (parts of ISIC 3710, 381904, and 381905), and advanced materials (part of ISIC 3513, 3610, 3620, 3710 and 3720). The remaining surveys deal with the important issue of financial and technological revitalization of capital goods industries. The industries covered are semiconductors (ISIC 383228), power-generating equipment (ISIC 3511), fertilizer equipment (ISIC 3822), industrial lift trucks (ISIC 3537), and numerically controlled machine tools (ISIC 3823).

59. In the primary processing industry, profitability and subsequent investment vary with the cyclical market conditions induced by changes in the industries requiring its output. This is particularly true of raw materials processors such as the market pulp and copper processing industries. Fluctuations in cocoa also depend on supply problems, and in seafood they vary with price and consumer taste. The petrochemical survey describes an industry that has forward linkages to other industries such as automobiles, other finished chemicals, clothing and housewares, while competing with other new materials such as synthetic or advanced materials, particularly as technology shifts.

60. In the case of intermediate industries, the production level depends not only on the derived demand for their outputs but also on the costs of their inputs. These industries are also critical for their forward and backward linkages to other industries in the overall economy. All the included industries also depend on technological advances to continue their growth. The survey of the fine chemicals industry reveals that it has very close forward linkages with the pharmaceutical, agricultural raw material and food industries. New types of chemicals have to be developed as the medical industry strives further to conquer traditional and new diseases. New chemicals are also needed as insect, fungus and weed varieties become hardier and more resistant. The higher value-added steel survey addresses new technological developments in this growing industry, and also suggests how environmental implications of steel production can be overcome with the new products. The survey of the advanced materials industry reveals the speed of technological change relating to factor inputs taking place in many industries. Advanced materials compete increasingly with steel, copper, wood and chemical products, including plastics, in many areas of product manufacturing. Finally, the survey of the semiconductor industry illustrates how quickly new technologies are advanced and applied. Of particular note is how quickly the Republic of Korea and Taiwan Province have been able to enter these high-technology domains.

61. Among the capital goods industries, the survey of power-generating equipment illustrates how large industries in the North cover the world markets; yet at the same time, it shows how such industries can operate to the benefit of the South. For instance, power-generating equipment firms are being asked to participate financially in private electricity-generating firms in developing countries. The surveys of fertilizer equipment and copper processing illustrate two industries whose future to a certain extent depends on progress in developing countries. The industrial lift-truck industry depends more on what is happening in the North, particularly as business conditions affect materials handling and transport. The numerically controlled machine tool and the semiconductor industries are technologically sophisticated and still dominated by developed countries in world production and trade. The development of these strategic industries poses a formidable challenge to developing countries. The Republic of Korea and Taiwan Province have already taken up the challenge.

62. The surveys vary in scope and depth depending on the availability of data, which are still incomplete and inadequate for certain industries, particularly those related to developing countries. Nevertheless, the findings seem to point to a number of common salient features, which are summarized below:

(a) Growth has levelled off in many industries, reflecting the gathering impact of the world recession in the latter part of 1992 and its continuation in 1993. In some of the resource-based industries, such as copper processing, capacity utilization has been high and stocks for certain products have become low. The steel industry has just gone through a period of retrenchment, and price levels are not yet sufficiently high to stimulate capacity expansion, yet some hope rests in the development of higher value-added steel products. In the case of fertilizers, demand increases have nudged prices upwards, with some new capacity additions pacing the fertilizer equipment industry. Likewise, the currently low level of capacity utilization coupled with environmental concerns in the petrochemicals industry suggests that no new capacity expansion will soon occur. In capital goods industries such as industrial lift trucks, sales in some countries are influenced by recession, while growth is occurring in the markets of other countries with growing manufacturing sectors;

(b) A growing trend towards less government intervention and more deregulation and privatization is discernible. One of the most noticeable changes is taking place in the power-generating industries, where a number of Governments are encouraging private electricity generation. In the steel industry, the privatization of government-owned companies is occurring increasingly in both the North and the South. However, the converse is true in the petrochemicals industry, where government involvement has increased. In the countries of Eastern Europe and the former Soviet Union, the rate of privatization has become extremely high; this movement in fact is likely to dominate economic change in those countries over the next several years. However, progress in the new market-oriented industries is slow, and in the case of the machine tool industry, some time will be required before modernization is completed;

(c) Trends towards consolidation have been evident among the more advanced industries, particularly in high technology, as companies gear up to global competition. Thus, merger and acquisition activity has been extensive in the semiconductor and the power-generating equipment industries. This extensive restructuring has been a response to substantial excess capacity, and adverse economic conditions have weakened demand. The restructuring of these industries worldwide has been carried out not only through the closure of obsolete plants, upgrading capacity, trimming the workforce, increased research and development expenditures and a shift in production toward higher value-added output, but also through mergers, take-over bids and acquisitions. The copper-processing industry, which is now experiencing greater sales and profits, provides a good example of the benefits gained by industries that engaged in such restructuring. Examples of other such industries include the semiconductor and petrochemicals industries;

(d) In international trade, the United States and Asia are of growing importance as export markets for other countries, the former because it can take advantage of production cost differentials in exporting developing countries, and the latter because demand has far outstripped the capacity of local supply. The countries of Eastern Europe and the former Soviet Union are likely to provide markets eventually for high-technology products such as higher value-added steels, advanced materials or semiconductors. Another important factor will be the impact on world markets of increasing unification of the EC countries;

(e) The rapid adoption of new technologies appears to be essential to the survival and expansion of many capital goods industries. For example, the modernization of the numerically controlled machine tool industry depends on new technologies such as automatic tool and process control operations, numerical control systems, machinery centres, turning machinery, automation and computers, and flexible cells. Technology has also been driving the power-generating equipment industry, where energy costs and environmental controls have fostered more energy-efficient and lower-polluting equipment. Furthermore, many mining and mineral-processing industries have developed or purchased subdivisions that produce advanced materials, which often serve as substitutes for traditional mineral-based products;

(f) Not surprisingly, many transnational corporations located in the United States, Japan and Western Europe are increasingly moving towards global market integration and concentration, particularly in technology, research-, and development-intensive industries, such as power-generating equipment, semiconductors and fine chemicals. However, the location of such industries in developed countries is likely to persist, because of their need for advanced technology and financial resources, and because of their proximity to their respective end-using industries;

(g) Environmental concerns are having a growing impact on the technology choice and the location of highly polluting industries. This has become paramount in the power-generating equipment industry, where users have to make a choice, for example, between natural gas or coal-fired boilers, nuclear power or hydropower. Investment also in other industries such as petrochemicals, industrial lift trucks, seafood processing, higher value-added steel, copper processing and market pulp for paper are being markedly affected by more stringent environmental regulations and consequent higher costs of pollution abatement. There is thus likely to be relocation of these and other industries to developing countries, where pollution controls are less stringent. In some cases, such as petrochemicals, the production of lower-technology chemicals would also be more suited to production in developing countries. In other cases, the market pulp industry is concerned as to whether Governments will influence increased use of waste paper;

(h) Finally, increased demand for manufactured output in developing countries has caused a renewed shift in manufacturing capacity to these countries. Some examples of the industries involved are cocoa processing, seafood processing and petrochemicals. In the case of advanced materials the shift has been slower, but some attraction also exists in the availability of raw material feedstocks. An increase in the demand for such manufactured products is also expected in Eastern Europe and the former Soviet Union.